

18/01/2009,10563125.trn

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NEWS 3 NOV 26 MARPAT enhanced with FSORT command
NEWS 4 NOV 26 MEDLINE year-end processing temporarily halts
availability of new fully-indexed citations
NEWS 5 NOV 26 CHEMSAFE now available on STN Easy
NEWS 6 NOV 26 Two new SET commands increase convenience of STN
searching
NEWS 7 DEC 01 ChemPort single article sales feature unavailable
NEWS 8 DEC 12 GBFULL now offers single source for full-text
coverage of complete UK patent families
NEWS 9 DEC 17 Fifty-one pharmaceutical ingredients added to PS
NEWS 10 JAN 06 The retention policy for unread STNmail messages
will change in 2009 for STN-Columbus and STN-Tokyo
NEWS 11 JAN 07 WPIDS, WPINDEX, and WPIX enhanced Japanese Patent
Classification Data

NEWS EXPRESS JUNE 27 08 CURRENT WINDOWS VERSION IS V8.3,
AND CURRENT DISCOVER FILE IS DATED 23 JUNE 2008.

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NEWS IPC8 For general information regarding STN implementation of IPC 8

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 10:41:14 ON 18 JAN 2009

=> file reg
COST IN U.S. DOLLARS SINCE FILE TOTAL

18/01/2009,10563125.trn

	ENTRY	SESSION
FULL ESTIMATED COST	0.22	0.22

FILE 'REGISTRY' ENTERED AT 10:41:41 ON 18 JAN 2009
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STRUCTURE FILE UPDATES: 16 JAN 2009 HIGHEST RN 1094159-77-9
DICTIONARY FILE UPDATES: 16 JAN 2009 HIGHEST RN 1094159-77-9

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

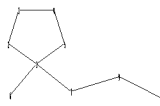
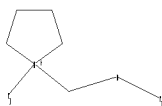
Please note that search-term pricing does apply when
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REGISTRY includes numerically searchable data for experimental and
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on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

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Uploading C:\Program Files\Stnexp\Queries\10563125.str



18/01/2009,10563125.trn

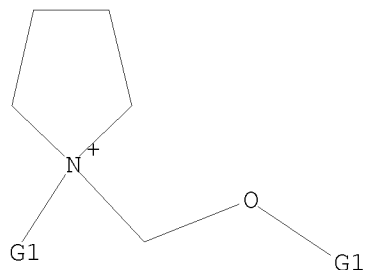
chain nodes :
6 7 9 10
ring nodes :
1 2 3 4 5
chain bonds :
1-6 1-7 7-9 9-10
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
1-2 1-5 1-6 1-7 7-9 9-10
exact bonds :
2-3 3-4 4-5
isolated ring systems :
containing 1 :

G1:CH3,Et

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 9:CLASS 10:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



G1 Me,Et

Structure attributes must be viewed using STN Express query preparation.

=> s l1
SAMPLE SEARCH INITIATED 10:43:35 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 10 TO ITERATE

100.0% PROCESSED 10 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 11 TO 389

18/01/2009,10563125.trn

PROJECTED ANSWERS: 2 TO 124

L2 2 SEA SSS SAM L1

=> s l1 full

FULL SEARCH INITIATED 10:43:40 FILE 'REGISTRY'

FULL SCREEN SEARCH COMPLETED - 210 TO ITERATE

100.0% PROCESSED 210 ITERATIONS

49 ANSWERS

SEARCH TIME: 00.00.01

L3 49 SEA SSS FUL L1

=> file hcaplus

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

ENTRY

SESSION

FULL ESTIMATED COST

186.84

187.06

FILE 'HCAPLUS' ENTERED AT 10:43:46 ON 18 JAN 2009

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FILE COVERS 1907 - 18 Jan 2009 VOL 150 ISS 4

FILE LAST UPDATED: 16 Jan 2009 (20090116/ED)

HCAplus now includes complete International Patent Classification (IPC) reclassification data for the third quarter of 2008.

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This file contains CAS Registry Numbers for easy and accurate substance identification.

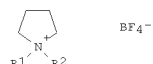
=> s l3

L4 16 L3

=> d ed abs ibib hitstr tot

18/01/2009,10563125.trn

L4 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 07 Nov 2008
GI



AB The solns. include: (a) compds. (I), where R1, R2 = Me, Et, methoxymethyl, ethoxy-Me group, and R1 and R2 may form ring structure, and (b) solvents from ≥1 of Me acetate, its fluorinated derivative, Me propionate and its fluorinated derivative

ACCESSION NUMBER: 2008:1339115 HCAPLUS
DOCUMENT NUMBER: 149:547100
TITLE: Electrolytic solutions for electric double-layer capacitors
INVENTOR(S): Shima, Hiroaki; Hikita, Shoji; Abe, Yoshinobu; Nabeshima, Akihiro; Nakagawa, Taiji; Uetani, Masatoshi; Ueno, Mifuyu
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

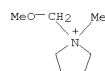
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2008270437	A	20081106	JP 2007-109802	20070418

PRIORITY APPLN. INFO.: JP 2007-109802 20070418

OTHER SOURCE(S): MARPAT 149:547100
IT 615564-11-9, N-Methoxymethyl-N-methylpyrrolidinium tetrafluoroborate
RL: TEM (Technical or engineered material use); USES (Uses) (electrolytic solns. for elec. double-layer capacitors)
RN 615564-11-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)

CM 1
CRN 615564-10-8
CMF C7 H16 N O

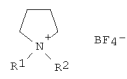
L4 ANSWER 1 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2
CRN 14874-70-5
CMF B F4
CCI CCS



L4 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 16 Oct 2008
GI



AB Disclosed is an electrolyte solution for elec. double layer capacitors, which is characterized by containing the following components from a compound represented by the formula (I), where R1 and R2 may be the same as or different from each other, and each represents a Me group, an Et group, a methoxymethyl group or an ethoxy-Me group or may combine together to form a ring structure, and a mixed solvent containing Et Me carbonate, ≥ 1 member selected from chain carbonates other than Et Me carbonate, and ≥ 1 member selected from cyclic carbonates.

ACCESSION NUMBER: 2008:1244953 HCAPLUS
DOCUMENT NUMBER: 149:484744
TITLE: Electrolyte solution for electric double layer capacitor
INVENTOR(S): Shima, Hiroaki; Hiketa, Shoji; Abe, Yoshinobu; Nabeshima, Akihiro; Nakagawa, Taiji; Uetani, Masatoshi
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan
SOURCE: PCT Int. Appl., 18pp.
CODEN: FIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008123529	A1	20081016	WO 2008-JP56508	20080326

W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

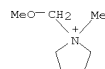
PRIORITY APPLN. INFO.: JP 2007-83395 A 20070328

OTHER SOURCE(S): MARPAT 149:484744
IT 615564-11-9
RL: TEM (Technical or engineered material use); USES (Uses) (pyrrolidinium tetrafluoroborate electrolyte solution for elec. double

L4 ANSWER 2 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

layer capacitor)
RN 615564-11-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)

CM 1
CRN 615564-10-8
CMF C7 H16 N O



CM 2
CRN 14874-70-5
CMF B F4
CCI CCS



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

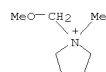
L4 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 28 Mar 2008
AB The method produces high-purity quaternary ammonium salt by adding oxide or hydroxide of Group 1-2, 12-13 metal into quaternary ammonium salt containing protonic acid salt of tertiary amine impurity for neutralizing the protonic acid salt of a tertiary amine to produce tertiary amine, water, and metal salt; and removing the produced tertiary amine, water, and metal salt from the system.
ACCESSION NUMBER: 2008:380956 HCAPLUS
DOCUMENT NUMBER: 148:429356
TITLE: Method for producing high-purity quaternary ammonium salt
INVENTOR(S): Nishida, Tetsuo; Hirano, Kazutaka; Oka, Akinori; Abe, Yoshinobu; Nabeshima, Akihiro
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan; Stella Chemifa Corporation
SOURCE: PCT Int. Appl., 30pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2008035796	AI	20080327	WO 2007-JP68596	20070918
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: JP 2006-252229 A 20060919

IT 615564-11-9P
RL: PUR (Purification or recovery); PREP (Preparation)
(method for producing high-purity quaternary ammonium salt)
RN 615564-11-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, tetrafluoroborate(1-) (1:1)
(CA INDEX NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O

L4 ANSWER 3 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



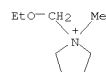
CM 2
CRN 14874-70-5
CMF B F4
CCI CCS



REFERENCE COUNT: 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 04 Jan 2008
AB To contribute to a deeper insight into the hazard potential of ionic liqs. to humans and the environment, an acetylcholinesterase (AChE) inhibition screening assay was used to identify toxicophore substructures and interaction potentials mediating enzyme inhibition. The pos. charged nitrogen atom, a widely delocalized aromatic system, and the lipophilicity of the side chains connected to the cationic head groups can be identified as the key structural elements in binding to the enzymes active site. With respect to this, the dimethylaminopyridinium, the quinolinium and the pyridinium head groups exhibit a very strong inhibitory potential to the enzyme with IC50 values around 10 µM. In contrast, the polar and non-aromatic morpholinium head group is found to be only weakly inhibiting to the enzyme activity, with IC50 values > 500 µM. The introduction of polar hydroxy, ether or nitrile functions into the alkyl side chain is shown to be a potent structural alteration to shift the corresponding ionic liqs. to a lower inhibitory potential. Supporting this fact, for a series of imidazolium cations, a QSAR correlation was set up by the linear regression of the log IC50 vs. the logarithm of the HPLC-derived lipophilicity parameter k0. Addnl., a broad set of anion species (inorg., organic and complex borate anions), commonly used as ionic liquid counterions, was tested and the vast majority exhibited no effect on AChE. Only the fluoride and fluoride containing anion species which readily undergo hydrolytic cleavage can be identified to act as AChE inhibitors.
ACCESSION NUMBER: 2008:13486 HCAPLUS
DOCUMENT NUMBER: 148:349741
TITLE: Qualitative and quantitative structure activity relationships for the inhibitory effects of cationic head groups, functionalized side chains and anions of ionic liquids on acetylcholinesterase
AUTHOR(S): Arning, Juergen; Stolte, Stefan; Boesch, Andrea; Stock, Frauke; Pitner, William-Robert; Welz-Biermann, Urs; Jastorff, Bernd; Ranke, Johannes
CORPORATE SOURCE: UFT - Centre for Environmental Research and Technology, University of Bremen, Bremen, D-28359, Germany
SOURCE: Green Chemistry (2008), 10(1), 47-58
CODEN: GRCHFJ; ISSN: 1463-9262
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 151263-00-2
RL: BSU (Biological study, unclassified); BIOL (Biological study) (qual. and quant. structure activity relationships for inhibitory effects of cationic head groups, functionalized side chains and anions of ionic liqs. on acetylcholinesterase)
RN 151263-00-2 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, chloride (1:1) (CA INDEX NAME)

L4 ANSWER 4 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

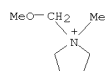


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REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
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18/01/2009,10563125.trn

L4 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 20 Nov 2006
AB Fourteen kinds of ammonium salt, including nine ionic liqs., were evaluated for use as the electrolyte (as a solute) of an elec. double layer capacitor (EDLC) from the viewpoint of practical performance and thermal stability. For this study, three kinds of anion species were selected for the counter anion: tetrafluoroborate (BF₄), hexafluorophosphate (PF₆) and bis(trifluoromethylsulfonyl)imide (TFSI) anions. A series of EDLCs with only 0.4% deviation in the capacitance of each cell, based on activated carbon and various salts in propylene carbonate (PC), were strictly prepared. The capacitance at room temperature, and the resistance value of the EDLCs at a relatively large d.c. at low temps. were measured. We also examined the durability of these systems by continuous charging at 70°C and 3.0 V. We report that N-(2-methoxyethyl)-N-methylpyrrolidinium-BF₄, a cyclic aliphatic quaternary ammonium with a methoxyethyl functional group, is the preferred ionic liquid for an EDLC electrolyte with respect to capacitance, power d., even at low temps. and thermal durability.
ACCESSION NUMBER: 2006:1215499 HCAPLUS
DOCUMENT NUMBER: 147:61753
TITLE: Ionic liquids containing the tetrafluoroborate anion have the best performance and stability for electric double layer capacitor applications
AUTHOR(S): Yuyama, Kanako; Masuda, Gen; Yoshida, Hiroshi; Sato, Takaya
CORPORATE SOURCE: Research & Development Center, Nissinbo Industries Incorporated, 1-2-3 Onodai, Midoriku, Chiba, 267-0056, Japan
SOURCE: Journal of Power Sources (2006), 162(2), 1401-1408
CODEN: JPSODZ; ISSN: 0378-7753
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT 615564-10-8
RL: PRP (Properties); TEM (Technical or engineered material use); USES (Uses)
(ionic liqs. containing tetrafluoroborate anion for elec. double layer capacitors)
RN 615564-10-8 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl- (CA INDEX NAME)



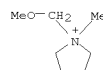
L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 27 Jul 2006
GI
AB Disclosed is a quaternary ammonium salt represented by the formula I (R₁ = straight chain or branched alkyl group having 1-4 carbon atoms; R₂ = straight chain or branched alkyl group having 1-3 carbon atoms; and X- = CF₃CO₂ -, CF₃SO₃BF₃ -, ClBF₃ -, AlF₄ -, CF₃BF₃ -, C₂F₅BF₃ -, N(SO₂F)₂ -, PF₆ -, AsF₆ - or SbF₆ -).
ACCESSION NUMBER: 2006:733596 HCAPLUS
DOCUMENT NUMBER: 145:191966
TITLE: Quaternary ammonium salt, electrolyte, electrolyte solution and electrochemical device
INVENTOR(S): Nishida, Tetsuo; Hiranou, Kazutaka; Tomisaki, Megumi; Tashiro, Yasutaka; Tsurumaru, Hitoshi; Nabeshima, Akihiro; Abe, Yoshinobu; Tokuda, Hiroaki; Oka, Akinori
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan; Stella Chemifa Corporation
SOURCE: PCT Int. Appl., 97 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006077894	A1	20060727	WO 2006-JP300664	20060112
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MM, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
CA 2597882	A1	20060727	CA 2006-2597882	20060112
EP 1837333	A1	20070926	EP 2006-700847	20060112
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
CN 101103009	A	20080109	CN 2006-80002212	20060112
US 20080050657	A1	20080228	US 2007-795036	20070711
KR 2007094961	A	20070927	KR 2007-718400	20070810
PRIORITY APPLN. INFO.:			JP 2005-5768	A 20050112

L4 ANSWER 5 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE REFORMAT

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
JP 2005-5789 A 20050112
JP 2005-228320 A 20050805
WO 2006-JP300664 W 20060112
WO 2006-JP664 W 20060112

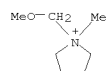
OTHER SOURCE(S): MARPAT 145:191966
IT 820958-87-0P 820958-88-1P 820958-89-2P 834861-90-4P 902462-35-5P 902773-35-7P 902773-36-8P 902773-37-9P 902773-38-0P 902773-39-1P 902773-42-6P 902773-43-7P 902773-44-8P 902773-45-9P 902773-46-0P 902773-47-1P
RL: DEV (Device component use); IMF (Industrial manufacture); PRP (Properties); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium salt for electrochem. device)
RN 820958-87-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, 1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O



CM 2
CRN 37181-39-8
CMF C F3 O3 S
F
F-C-SO₃⁻
F
RN 820958-88-1 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, 2,2,2-trifluoroacetate (1:1) (CA INDEX NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O

18/01/2009,10563125.trn

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

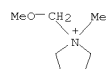
CRN 14477-72-6
CMF C2 F3 O2



RN 820958-89-2 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, hexafluorophosphate(1-)
(9CI) (CA INDEX NAME)

CM 1

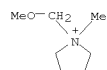
CRN 615564-10-8
CMF C7 H16 N O



CM 2

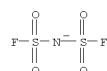
CRN 16919-18-9
CMF F6 P
CCI CCS

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

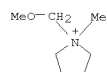
CRN 44821-49-0
CMF F2 N O4 S2



RN 902773-35-7 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
(T-4)-trifluoro(trifluoromethanesulfonato- κ O)borate(1-) (9CI) (CA
INDEX NAME)

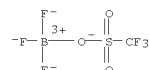
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CRN 615564-10-8
CMF C7 H16 N O



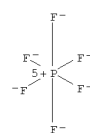
CM 2

CRN 67418-39-7
CMF C B F6 O3 S
CCI CCS



RN 902773-36-8 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
(T-4)-chlorotrifluoroborate(1-) (9CI) (CA INDEX NAME)

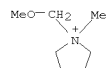
L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



RN 834861-90-4 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
(T-4)-trifluoro(pentafluoroethyl)borate(1-) (9CI) (CA INDEX NAME)

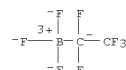
CM 1

CRN 615564-10-8
CMF C7 H16 N O



CM 2

CRN 390750-62-6
CMF C2 B F8
CCI CCS



RN 902462-35-5 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with imidodisulfuryl
fluoride (1:1) (9CI) (CA INDEX NAME)

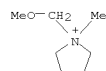
CM 1

CRN 615564-10-8
CMF C7 H16 N O

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

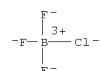
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CMF C7 H16 N O



CM 2

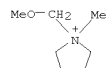
CRN 36503-32-9
CMF B Cl F3
CCI CCS



RN 902773-37-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
(T-4)-tetrafluoroaluminate(1-)
(9CI) (CA INDEX NAME)

CM 1

CRN 615564-10-8
CMF C7 H16 N O

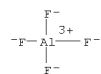


CM 2

CRN 21340-02-3
CMF Al F4
CCI CCS

18/01/2009,10563125.trn

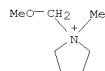
L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



RN 902773-38-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, hexafluoroarsenate(1-) (9CI)
(CA INDEX NAME)

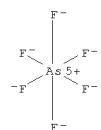
CM 1

CRN 615564-10-8
CMF C7 H16 N O



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS

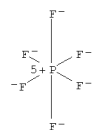


RN 902773-39-1 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, (OC-6-11)-hexafluoroantimonate(1-) (9CI) (CA INDEX NAME)

CM 1

CRN 615564-10-8
CMF C7 H16 N O

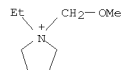
L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



RN 902773-43-7 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, hexafluoroarsenate(1-) (9CI)
(CA INDEX NAME)

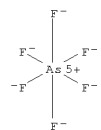
CM 1

CRN 820958-92-7
CMF C8 H18 N O



CM 2

CRN 16973-45-8
CMF As F6
CCI CCS

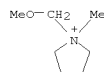


RN 902773-44-8 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, (T-4)-chlorotrifluoroborate(1-) (9CI) (CA INDEX NAME)

CM 1

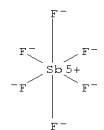
CRN 820958-92-7
CMF C8 H18 N O

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

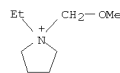
CRN 17111-95-4
CMF F6 Sb
CCI CCS



RN 902773-42-6 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, hexafluorophosphate(1-) (9CI)
(CA INDEX NAME)

CM 1

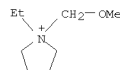
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CMF C8 H18 N O



CM 2

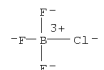
CRN 16919-18-9
CMF F6 P
CCI CCS

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

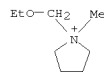
CRN 36503-32-9
CMF B Cl F3
CCI CCS



RN 902773-45-9 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, (T-4)-tetrafluoroaluminate(1-) (9CI) (CA INDEX NAME)

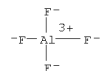
CM 1

CRN 764620-44-2
CMF C8 H18 N O



CM 2

CRN 21340-02-3
CMF Al F4
CCI CCS



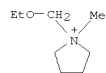
RN 902773-46-0 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, hexafluorophosphate(1-) (9CI)
(CA INDEX NAME)

18/01/2009,10563125.trn

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

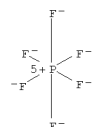
CM 1

CRN 764620-44-2
CMP C8 H18 N O



CM 2

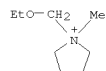
CRN 16919-18-9
CMP F6 P
CCI CCS



RN 902773-47-1 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, hexafluoroarsenate(1-) (9CI)
(CA INDEX NAME)

CM 1

CRN 764620-44-2
CMP C8 H18 N O

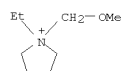


CM 2

CRN 16973-45-8

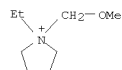
L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

RN 902462-34-4 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, chloride (1:1) (CA INDEX NAME)



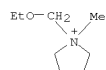
● Cl⁻

RN 902462-36-6 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, fluoride (1:1) (CA INDEX NAME)



● F⁻

RN 902462-37-7 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, fluoride (1:1) (CA INDEX NAME)



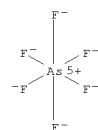
● F⁻

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

L4 ANSWER 6 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

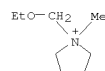
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CCI CCS



IT 151263-00-2P 902462-33-3P 902462-34-4P
902462-36-6P 902462-37-7P

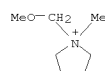
RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);
RACT (Reactant or reagent).

(preparation of quaternary ammonium salt for electrochem. device)
RN 151263-00-2 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

RN 902462-33-3 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

L4 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN

ED Entered STN: 27 Jul 2006

AB Disclosed are a quaternary ammonium salt (I), an electrolyte solution and an electrochem. device (In the formula, R1 represents a straight chain or branched alkyl group having 1-4 C atoms, R2 represents a straight chain or branched alkyl group having 1-3 C atoms, and X-1 represents N(CN)2⁻, SCN⁻, NO3⁻, NCO⁻ or NO2⁻). The electrolyte has high solubility in organic solvents and elec. conductivity The electrolyte contains the quaternary ammonium salt, and the electrolyte solution contains the electrolyte and organic solvent from ethylene carbonate, propylene carbonate, di-Me carbonate, Et carbonate, dimethoxy ethane and MeCN. The electrochem. device uses the electrolyte.

ACCESSION NUMBER: 2006:733123 HCAPLUS

DOCUMENT NUMBER: 145:176099

TITLE: Quaternary ammonium salt, electrolyte, electrolyte solution and electrochemical device

INVENTOR(S): Nishida, Tetsuo; Hirano, Kazutaka; Tomisaki, Megumi; Nabeshima, Akihiro; Abe, Yoshinobu; Tokuda, Hiroaki; Oka, Akinori

PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan; Stella Chemifa Corporation

SOURCE: PCT Int. Appl., 50 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006077895	A1	20060727	WO 2006-JP300668	20060112
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, GU, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
EP 1840124	A1	20071003	EP 2006-700857	20060112
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRIORITY APPLN. INFO.:			JP 2005-5580	A 20050112

WO 2006-JP300668 W 20060112

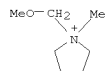
OTHER SOURCE(S): MARPAT 145:176099

IT 901767-90-6P, N-Methoxymethyl-N-methylpyrrolidinium dicyanamide
901767-91-7P, N-Methoxymethyl-N-methylpyrrolidinium thiocyanate
901767-92-8P, N-Methoxymethyl-N-methylpyrrolidinium nitrate

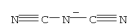
18/01/2009,10563125.trn

L4 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
901767-93-9P, N-Ethyl-N-methoxymethylpyrrolidinium thiocyanate
901767-94-0P, N-Ethoxymethyl-N-methylpyrrolidinium dicyanamide
901770-06-7P
RL: PNU (Preparation, unclassified); PRP (Properties); TEM (Technical or
engineered material use); PREP (Preparation); USES (Uses)
(quaternary ammonium salt, electrolyte, electrolyte soln. and
electrochem. device)
RN 901767-90-6 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with cyanocyanamide
(1:1)
(9CI) (CA INDEX NAME)

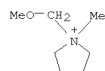
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CMF C7 H16 N O



CM 2
CRN 17997-40-9
CMF C2 N3



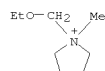
RN 901767-91-7 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, thiocyanate (9CI) (CA INDEX
NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O



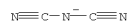
L4 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
CM 2
CRN 302-04-5
CMF C N S



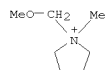
RN 901767-94-0 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, salt with cyanocyanamide (1:1)
(9CI) (CA INDEX NAME)
CM 1
CRN 764620-44-2
CMF C8 H18 N O



CM 2
CRN 17997-40-9
CMF C2 N3



RN 901770-06-7 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with cyanate (1:1) (CA
INDEX NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O

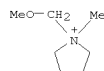


CM 2

L4 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
CM 2
CRN 302-04-5
CMF C N S



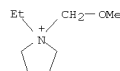
RN 901767-92-8 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, nitrate (1:1) (CA INDEX
NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O



CM 2
CRN 14797-55-8
CMF N O3



RN 901767-93-9 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, thiocyanate (9CI) (CA INDEX
NAME)
CM 1
CRN 820958-92-7
CMF C8 H18 N O



L4 ANSWER 7 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
CRN 661-20-1
CMF C N O

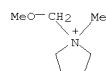


REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR
THIS
FORMAT RECORD. ALL CITATIONS AVAILABLE IN THE RE

18/01/2009,10563125.trn

L4 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 23 Mar 2006
AB New cyclic quaternary ammonium salts, composed of
N-R-N-methylpyrrolidinium, -oxazolidinium, -piperidinium, or
-morpholinium
cations (R = n-Bu, MeOCH₂, MeOCH₂CH₂) and a perfluoroalkyltrifluoroborate
anion ([RFBF₃]⁻, RF = F₃C, C₂F₅, n-C₃F₇, n-C₄F₉), were synthesized and
characterized. Most of these salts are liqs. at room temperature. The
key properties of these salts, namely, phase transitions, thermal stability,
d., viscosity, conductivity, and electrochem. windows, were measured and
compared to those of their corresponding [BF₄]⁻ and [(CF₃SO₂)₂N]⁻ salts. The
structural effect on all the above properties was intensively studied in
terms of the identity of the cation and anion, variation of the side
chain in the cation (i.e., alkyl vs. alkyl ether), and change in the length of
the perfluoroalkyl group (RF) in the [RFBF₃]⁻ ion. The reduction of Li⁺
ions and reoxidn. of Li metal took place in pure
N-butyl-N-methyl-pyrrolidinium
pentafluoroethyltrifluoroborate as the supporting electrolyte. Some of
these new salts show desirable properties, including low m.ps., high
thermal stabilities, low viscosities, high conductivities, and wide
electrochem. windows, and may thus be potential candidates for use as
electrolytes in high-energy storage devices. In addition, many salts are
ionic plastic crystals.
ACCESSION NUMBER: 2006:270718 HCAPLUS
DOCUMENT NUMBER: 144:468095
TITLE: Cyclic quaternary ammonium ionic liquids with
perfluoroalkyltrifluoroborates: synthesis,
characterization, and properties
AUTHOR(S): Zhou, Zhi-Bin; Matsumoto, Hajime; Tatsumi, Kuniaki
CORPORATE SOURCE: Research Institute for Ubiquitous Energy Devices,
National Institute of Advanced Industrial Science and
Technology, 1-8-31 Midorigaoka, Ikeda, Osaka,
563-8577, Japan
SOURCE: Chemistry--A European Journal (2006), 12(8),
2196-2212
CODEN: CEUJED; ISSN: 0947-6539
PUBLISHER: Wiley-VCH Verlag GmbH & Co. KGaA
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 144:468095
IT 615564-11-9P 820958-79-0P 834861-90-4P
886439-15-2P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)
(preparation, d., viscosity and thermal and electrochem. properties of
pyrrolidinium, oxazolidinium, piperidinium or morpholinium quaternary
ammonium ionic liqs.)
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(CA INDEX NAME)
CM 1

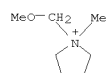
L4 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
CRN 615564-10-8
CMF C7 H16 N O



CM 2
CRN 14874-70-5
CMF B F4
CCI CCS

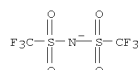


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CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)
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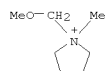


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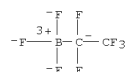
L4 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



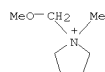
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CMF C7 H16 N O



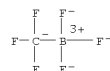
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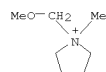
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CM 1
CRN 615564-10-8
CMF C7 H16 N O



L4 ANSWER 8 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
CM 2
CRN 44629-17-6
CMF C B F6
CCI CCS



IT 833446-37-0P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT
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(preparation, d., viscosity and thermal and electrochem. properties of
pyrrolidinium, oxazolidinium, piperidinium or morpholinium quaternary
ammonium ionic liqs.)
RN 833446-37-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, bromide (1:1) (CA INDEX
NAME)



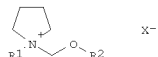
REFERENCE COUNT: 71 THERE ARE 71 CITED REFERENCES AVAILABLE FOR
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18/01/2009,10563125.trn

14 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
 ED Entered STN: 15 JUL 2005
 AB The ionic liquid comprises ≥ 1 anion selected from the group
 consisting of $[BF_3(CnF_{2n+1})]^-$ ($n = 2, 3, \text{ or } 4$) and ≥ 1 organic ammonium
 ion. The ionic liquid is manufactured by mixing a 1st compound
 containing the anion as
 as cation component with a 2nd compound containing the organic ammonium ion
 component.
 ACCESSION NUMBER: 2005:612308 HCAPLUS
 DOCUMENT NUMBER: 143:156299
 TITLE: Ionic liquid, its manufacture, and secondary lithium
 battery and double layer capacitor comprising the
 liquid
 INVENTOR(S): Matsumoto, Hajime; Zhou, Zhi-Bin
 PATENT ASSIGNEE(S): National Institute of Advanced Industrial Science and
 Technology, Japan
 SOURCE: PCT Int. Appl., 25 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.		KIND	DATE	APPLICATION NO.		DATE
WO	2005063773	A1	20050714	WO	2004A-JF19323	20041224
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EG, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW					
RW:	BH, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SG, TG, UG, ZM, ZW, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG					
EP	1698631	A1	20060906	EP	2004-807680	20041224
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS					
US	20070099079	A1	20070503	US	2006-596831	20060626
PRIORITY APPLN. INFO.:				JF	2003-431700	20031226
				JF	2004-19074	20040127
				JF	2004-19076	20040127
				JF	2004-94275	20040329
				JF	2004-94293	20040329
				JF	2004-285706	20040930
				WO	2004A-JF19323	20041224

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 13 Jan 2005
GI

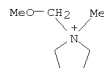


AB The ammonium salt is represented by I (R1 = C1-4 alkyl group; R2 = Me or Et group; and X- = F-containing anion) II (R1 and R2 are same as I; Y- = Cl-, Br-, I-, or MeOCO2-), or III (R1 and R2 are same as I; Z- = 1/2 CO32-, HCO3-, 1/2SO42-, ClO4-, CH3COO2-, or OH-). The electrolyte solution contains the above ammonium salt and an organic solvent mixture. The device, especially a secondary lithium battery or an elec. double layer capacitor, uses the above electrolyte solution.

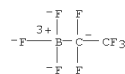
ACCESSION NUMBER: 2005:29321 HCAPLUS
DOCUMENT NUMBER: 142:117653
TITLE: Quaternary ammonium salt, electrolyte solution, and electrochemical device
INVENTOR(S): Nishida, Tetsuo; Tashiro, Yasutaka; Tomisaki, Megumi; Yamamoto, Masashi; Hirano, Kazutaka; Nabeshima, Akihiko; Tokuda, Hiroaki; Sato, Kenji; Higono, Takashi
PATENT ASSIGNEE(S): Otsuka Chemical Co., Ltd., Japan; Stella Chemifa Corporation
SOURCE: PCT Int. Appl., 122 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 200503108	A1	20050113	BB 04/JP9623	20040630
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GR, HU, ID, IL, IN, IS, JP, KE, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, US, UG, UZ, VC, VN, YU, ZA, ZM, ZW			
RN:	BW, CH, CM, CF, CG, CI, CL, CN, CO, CR, CU, CY, CZ, DE, DK, DM, DZ, EE, ES, FI, FR, GB, GR, GU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
AU 2004254231	A1	20050113	AU 2004-254231	20040630
CA 2530814	A1	20050113	CA 2530814	20040630
EP 1642894	A1	20060408	EP 2004-7092	20040630
R:	AE, BE, CH, DE, DK, ES, FR, GB, GR, HU, IL, LU, NL, SE, MC, PT, IE, SI, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK			
CN 1802362	A	20060712	CN 2004-80015741	20040630

L4 ANSWER 9 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
IT 834861-90-4
RL: TEM (Technical or engineered material use); USES (Uses)
(comps. of organic ammonium salts for electrolytes in secondary
lithium batteries and double-layer capacitors)
RN 834861-90-4 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
(7-4)-trifluoro(pentafluoroethyl)borate(1-) (9CI) (CA INDEX NAME)
CM 1
CRN 615564-10-8
CMF C7 H16 N O



CM 2
CRN 390750-62-6
CMF C2 B F8
CCI CCS



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4	ANSWER 10 OF 16	HCAPLUS	COPYRIGHT	2009 ACS ON STN	(Continued)
TW	263632	B	20061011	TW 2004-93119367	20040630
JP	3950464	B2	20070801	JP 2005-511389	20040630
RJ	2329257	C2	20080720	RJ 2006-102854	20040630
KR	757166	B1	20070907	KR 2005-725342	20051229
US	20070042271	A	20070222	US 2006-563125	20060626
JP	2007039460	A	20070215	JP 2006-238217	20060901
JP	4024824	B2	20071219		
JP	2007112811	A	20070510	JP 2006-353819	20061228
JP	2007306017	A	20071122	JP 2007-177516	20070705
PRIORITY APPLN. INFO.:				JP 2003-270225	A 20030701
				JP 2005-511389	A3 20040630
				WO 2004-JP9623	W 20040630
				JP 2006-238217	A3 20060901

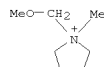
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OTHER SOURCE(S): MARPAT 142117653
IT 615564-11-9
    RL: DEV (Device component use); USES (Uses)
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        solvents
        for secondary lithium batteries and capacitors)
RN 615564-11-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, tetrafluoroborate (1-) (1:1)
    (CA INDEX NAME)

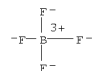
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CRN 615564-10-8
CMF C7 H16 N O

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CM 2
CRN 14874-70-5
CMF B F4
CCI CCS



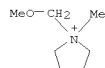
IT 820958-79-0
RL: DEV (Device component use); TEM (Technical or engineered material use); USES (Uses)

18/01/2009,10563125.trn

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
(electrolyte solns. contg. quaternary ammonium salts and org. solvents
for secondary lithium batteries and capacitors)
RN 820958-79-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

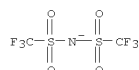
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CMF C7 H16 N O



CM 2

CRN 98837-98-0
CMF C2 F6 N O4 S2



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820958-84-7 820958-85-8 820958-86-9
820958-87-0 820958-88-1 820958-89-2
820958-90-5 820958-91-6 820958-93-8
820958-94-9 820958-96-1
RL: TEM (Technical or engineered material use); USES (Uses)
(electrolyte solns. containing quaternary ammonium salts and organic
solvents
for secondary lithium batteries and capacitors)

RN 820958-81-4 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, carbonate (2:1) (CA INDEX
NAME)

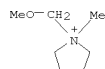
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CRN 615564-10-8
CMF C7 H16 N O

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

CM 1

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CMF C7 H16 N O

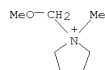


CM 2

CRN 14797-73-0
CMF C1 O4



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NAME)

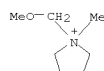


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CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, methyl carbonate (1:1) (CA
INDEX NAME)

CM 1

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CMF C7 H16 N O

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

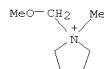
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NAME)

CM 1

CRN 615564-10-8
CMF C7 H16 N O



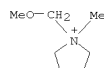
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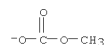
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CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, perchlorate (1:1) (CA INDEX
NAME)

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

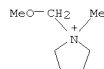
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RN 820958-86-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, acetate (1:1) (CA INDEX
NAME)

CM 1

CRN 615564-10-8
CMF C7 H16 N O



CM 2

CRN 71-50-1
CMF C2 H3 O2



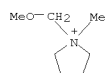
RN 820958-87-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-,
1,1,1-trifluoromethanesulfonate (1:1) (CA INDEX NAME)

CM 1

CRN 615564-10-8
CMF C7 H16 N O

18/01/2009,10563125.trn

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

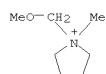
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CMF C F3 O3 S



RN 820958-88-1 HCAPLUS
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(CA INDEX NAME)

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CRN 615564-10-8
CMF C7 H16 N O



CM 2

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CMF C2 F3 O2

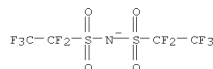


RN 820958-89-2 HCAPLUS

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

CM 2

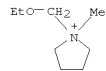
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RN 820958-91-6 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, tetrafluoroborate(1-) (1:1)
(CA INDEX NAME)

CM 1

CRN 764620-44-2
CMF C8 H18 N O



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



RN 820958-93-8 HCAPLUS
CN Pyrrolidinium, 1-ethyl-1-(methoxymethyl)-, salt with
1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]methanesulfonamide (1:1)
(9CI) (CA INDEX NAME)

CM 1

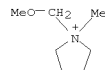
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L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
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(9CI)

(CA INDEX NAME)

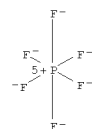
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CRN 615564-10-8
CMF C7 H16 N O



CM 2

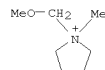
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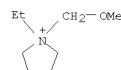
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CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, salt with
1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]ethanesulfonamide
(1:1) (9CI) (CA INDEX NAME)

CM 1

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CMF C7 H16 N O

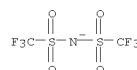


L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2

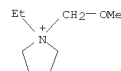
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CMF C2 F6 N O4 S2



RN 820958-94-9 HCAPLUS
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(CA INDEX NAME)

CM 1

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CMF C8 H18 N O



CM 2

CRN 14874-70-5
CMF B F4
CCI CCS



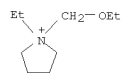
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CN Pyrrolidinium, 1-(ethoxymethyl)-1-ethyl-, tetrafluoroborate(1-) (1:1)
(CA INDEX NAME)

18/01/2009,10563125.trn

L4 ANSWER 10 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

CM 1

CRN 820958-95-0
CMF C9 H20 N O



CM 2

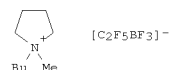
CRN 14874-70-5
CMF B F4
CCI CCS



REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

L4 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 22 Dec 2004
GI



I

AB A series of hydrophobic ionic liqs., e.g., I, comprising N-alkyl-N-methylpyrrolidinium and perfluoroethyltrifluoroborate were prepared and characterized. The [C2F5BF3]⁻-based salts showed lower m.ps. than the corresponding [BF4]⁻-based ones. Of these salts, some were liqs. at room temperature and show very low viscosities (37-71 cP at 25 °C), high ionic conductivities (3.0-6.8 mS/cm-1) and wide electrochem. windows.

ACCESSION NUMBER: 2004:1121653 HCAPLUS
DOCUMENT NUMBER: 142:176638
TITLE: Low-melting, low-viscous, hydrophobic ionic liquids: N-alkyl(alkyl ether)-N-methylpyrrolidinium perfluoroethyltrifluoroborate

AUTHOR(S): Zhou, Zhi-Bin; Matsumoto, Hajime; Tatsumi, Kuniaki
CORPORATE SOURCE: Research Institute for Ubiquitous Energy Devices, National Institute of Advanced Industrial Science and Technology, Osaka, 563-8577, Japan

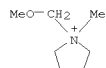
SOURCE: Chemistry Letters (2004), 33(12), 1636-1637
CODEN: CMLTAG; ISSN: 0366-7022

PUBLISHER: Chemical Society of Japan
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 142:176638

IT 833446-37-0
RL: RCT (Reactant); RACT (Reactant or reagent) (preparation and physicochem. properties of pyrrolidinium perfluoroethyltrifluoroborates via anion exchange of pyrrolidinium bromide followed by salt formation with perfluoroethyltrifluoro(hydro)boron)

RN 833446-37-0 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, bromide (1:1) (CA INDEX NAME)

L4 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



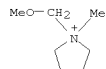
● Br⁻

IT 834861-90-4P
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (preparation, physicochem. properties, and electrochem. stability of pyrrolidinium perfluoroethyltrifluoroborates via anion exchange of pyrrolidinium bromide followed by salt formation with perfluoroethyltrifluoro(hydro)boron)

RN 834861-90-4 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, (T-4)-trifluoro(pentafluoroethyl)borate(1-) (9CI) (CA INDEX NAME)

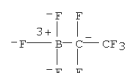
CM 1

CRN 615564-10-8
CMF C7 H16 N O



CM 2

CRN 390750-62-6
CMF C2 B F8
CCI CCS

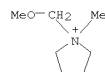


IT 833446-41-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (preparation, physicochem. properties, and electrochem. stability of pyrrolidinium perfluoroethyltrifluoroborates via anion exchange of pyrrolidinium bromide followed by salt formation with perfluoroethyltrifluoro(hydro)boron)

L4 ANSWER 11 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)

RN 833446-41-6 HCAPLUS

CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, hydroxide (1:1) (CA INDEX NAME)



● OH⁻

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

18/01/2009,10563125.trn

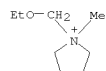
L4 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 31 Oct 2003
AB The present invention relates to an elec. double layer capacitor, particularly to an elec. double layer capacitor having high voltage retention and excellent reliability. The elec. double layer capacitor has
a pair of polarized electrodes and an electrolytic solution capable of forming an elec. double layer at the interface with the polarized electrodes, in which the electrolytic solution is an organic electrolytic solution containing a benzene with 1-6 fluorine atoms attached.
ACCESSION NUMBER: 2003:855351 HCAPLUS
DOCUMENT NUMBER: 139:344428
TITLE: Electric double layer capacitor with high voltage retention and excellent reliability
INVENTOR(S): Kawasato, Takeshi; Hiratsuka, Kazuya; Yoshida, Naoki; Ikeda, Katsuji
PATENT ASSIGNEE(S): Asahi Glass Company, Limited, Japan
SOURCE: U.S. Pat. Appl. Publ., 10 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20030202316	A1	20031030	US 2003-419895	20030422
US 6879482	B2	20050412		
JP 2004006803	A	20040108	JP 2003-107847	20030411
EP 1365427	A2	20031126	EP 2003-9189	20030422
EP 1365427	A3	20060405		
EP 1365427	B1	20080319		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRIORITY APPLN. INFO.: JP 2002-119059 A 20020422

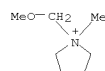
OTHER SOURCE(S): MARPAT 139:344428
IT 615564-11-9
RL: DEV (Device component use); USES (Uses)
(electrolytic solution containing; elec. double layer capacitor with high voltage retention and excellent reliability)
RN 615564-11-9 HCAPLUS
CN Pyrrolidinium, 1-(methoxymethyl)-1-methyl-, tetrafluoroborate(1-) (1:1) (CA INDEX NAME)
CM 1
CRN 615564-10-8
CMP C7 H16 N O

L4 ANSWER 13 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 11 Dec 1993
AB Antistatic properties of 1-(alkoxymethyl)- and 1-(alkylthiomethyl)-1-methylpyrrolidinium chlorides, 4-(alkylthiomethyl)-4-dodecyl- and 4-(alkylthiomethyl)-4-(2-hydroxyethyl)morpholinium chlorides, 1-(alkylthiomethyl)- and 1-(alkoxymethyl)-3-ethoxypyridinium chlorides, and 1-(alkylthiomethyl)-2-(butylthiomethyl)pyridinium chlorides were investigated. Of the 58 chlorides examined, 28 possessed excellent antistatic properties.
ACCESSION NUMBER: 1993:652602 HCAPLUS
DOCUMENT NUMBER: 119:252602
ORIGINAL REFERENCE NO.: 119:45035a, 45038a
TITLE: Antistatic properties of pyrrolidinium, morpholinium, and pyridinium chlorides with alkoxymethyl and alkylthiomethyl groups
AUTHOR(S): Pernak, J.; Mrowczynski, B.; Pasternak, A.; Prukala, D.
CORPORATE SOURCE: Tech. Univ., Poznan, Pol.
SOURCE: Tenside, Surfactants, Detergents (1993), 30(5), 328-30
CODEN: TSDEES; ISSN: 0932-3414
DOCUMENT TYPE: Journal
LANGUAGE: German
IT 151263-00-2
RL: PRP (Properties)
(antistatic properties of)
RN 151263-00-2 HCAPLUS
CN Pyrrolidinium, 1-(ethoxymethyl)-1-methyl-, chloride (1:1) (CA INDEX NAME)



● Cl⁻

L4 ANSWER 12 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)



CM 2
CRN 14874-70-5
CMP B F4
CCI CCS



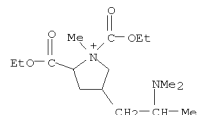
REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L4 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 22 Apr 2001
AB 5-(2-Dimethylaminopropyl)-2-piperidone (I) (36.8 g.) in 2 l. Et₂O at 0° treated with HCl gas, the precipitate filtered off, and dried in vacuo gave 50 g. I.2HCl (II). II (25.7 g.), 50 ml. SOCl₂, and 180 ml. SO₂Cl₂ refluxed 2 hrs. at 80°, the product concentrated in vacuo, the residue added portionwise to ice H₂O, the solution concentrated in vacuo, filtered with C, and the filtrate concentrated gave 38.5 g. 3,3-di-Cl derivative (III) of I.
Ba(OH).2.8H₂O (95 g.) in 1900 ml. boiling H₂O treated portionwise with III in 100 ml. H₂O, refluxed 2.5 hrs., the precipitate centrifuged, the solution concentrated to half volume, Ba++ removed by treating with H₂SO₄, the concentrated filtrate catalytically reduced with 0.6 g. PtO₂ (1.6 l. H absorbed in 15 hrs.) gave 2,4-HO₂C[MeCH(NMe₂)CH₂]C₄H₇N (IV). IV in 1 l. EtOH at 0° saturated with HCl gas, kept overnight, and the product concentrated in vacuo gave 35 g. IV.HCl; this in 35 ml. H₂O treated with 10N NaOH to pH 9, the solution at 10-15° treated alternately with 32 g. ClCO₂Et and 10 g. Na₂CO₃ in 40 g. H₂O, the product treated with excess Na₂CO₃, and extracted with Et₂O gave 14 g. 1,2,4-(EtO₂C)2[MeCH(NMe₂)CH₂]C₄H₆N (V), b_{0.2} 157°; picrate, m. 153-5°; V. MeI, needles, m. 200°. II (16 g.) treated as above to give IV, this in MeOH esterified by treating it with HCl gas, and this treated with ClCO₂Et gave 7.7 g. 1,2,4-MeO₂C(EtO₂C)[MeCH(NMe₂)CH₂]C₄H₆N (VI), b_{0.2} 145°; picrate, needles, m. 150°. V (30 g.) in 150 ml. Me₂CO and 85 g. MeI refluxed 1.5 hrs., the solution with H₂O evaporated to dryness, the residue in 150 ml. H₂O treated with Ag₂O (34 g. AgNO₃ and 8.5 g. NaOH), stirred 2.5 hrs. at 20-5°, the solution concentrated in vacuo, and the residue heated at 1 mm. 40 min. at 180-240° gave 20 g. volatile fraction and 3 g. residue. The former stirred with C₆H₆ and 10% HCl, the aqueous layer treated with K₂CO₃, and extracted with Et₂O gave 14 g. VI, b_{0.1} 140° (picrate, m. 150-1°); the C₆H₆ layer washed with NaHCO₃, saturated NaCl, and H₂O gave 3 g. 1,2,3-EtO₂C(MeO₂C)(C₃H₅)C₄H₆N (VII) b_{0.1} 125°; the volatile portion contained Me₃N (picrate, m. 218°). VII (4.4 g.) and 25.2 g. Ba(OH).2.8H₂O as a 20% aqueous solution refluxed 13 hrs., the BaCO₃ filtered off while hot, Ba++ removed by adding H₂SO₄ the H₂SO₄ removed by treating with Amberlite IR-4B, and the solution coned, gave 2.8 g. mixture (VIII) of 2,4-HO₂C(CH₂:CHCH₂)C₄H₇N (IX) and 2,4-HO₂C(MeCH:CH)C₄H₇N (X), m. 206-10°. Oxidation of VIII with O₃ yielded HCHO (dimedon derivative, m. 198°) and MeCHO (dimedon derivative, m. 140°). Catalytic reduction of 0.31 g. VIII with 0.2 g. Pd-C absorbed 55 ml. H in 20 min. and gave 0.26 g. 4,2-Pr(HO₂C)C₄H₇N, m. 216-18° (decomposition); picrate, m. 142°. Separation of VIII through the Cu salt yielded IX, m. 223° (decomposition), but crystalline X was not obtained.
ACCESSION NUMBER: 1959:45144 HCAPLUS
DOCUMENT NUMBER: 53:45144
ORIGINAL REFERENCE NO.: 53:8110e-1,811a
TITLE: Active components of Digenea simplex and related

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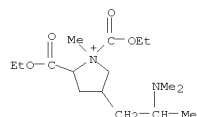
L4 ANSWER 14 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
ED Entered STN: 22 Apr 2001
AB cf. C.A. 53, 337b, 5238c. NaH (3.84 g.) and 19 g. CO(OEt)2 in 40 ml. Et2O
treated dropwise with 15.7 g. Me2CHCHCH2Ac (R = 1-piperidyl) in 16 ml. Et2O, refluxed 30 min., cooled, 8 ml. EtOH added, the solution poured into 250 ml. ice H2O, neutralized with 18 ml. AcOH, the oily layer extracted with Et2O, washed with H2O, NaHCO3, and saturated NaCl, dehydrated with MgSO4, and the product distilled gave 7.4 g. fraction, b0.4 105-25°, and 7.6 g. 1-EtO2CC5H10N (I), b0.9 55-6°; I gives a dibromide, C8H13O3NBr2, prisms, m. 140°. EtO2CCH2CO2K (340 g.) in 1 l. CC14 at -75° treated dropwise with 360 g. SOCl2, heated 2 hrs. at 80°, the precipitate filtered off, and the filtrate distilled gave 173 g. EtO2CCH2COCl, b25 79-80°. Mg (40 g.) in 870 ml. EtOH, 90 ml. xylene, and 15 ml. CC14 heated on an H2O bath and the solvent removed in vacuo Mg(OEt)2; this in 1200 ml. Et2O refluxed 15 min. with 310 g. EtO2CCH2CO2CMe3, the Mg enolate solution treated dropwise with 240 g. Me2CHCH:CHCOCl in 300 ml. Et2O, refluxed 30 min., cooled, 200 ml. H2O added, the Et2O layer washed with 10% H2SO4, and the Et2O layer concentrated gave 480 g. residue; this in 800 ml. C6H6 and 8.5 g. p-MeC6H4SO3H heated 2 hrs. at 90°, washed with saturated NaHCO3, and the product distilled gave 180 g. Me2CHCH:CHCOCH2CO2Et (II), b9-10 85-90°, n20D 1.4681; Cu salt, C20H30O6Cu, green granules, m. 133°. O2NCH2CO2Et (45.5 g.) and 21.1 g. II at 15-20° treated dropwise with 5.8 g. Et3N, kept 4 days at room temperature, the product stirred with 10% HCl and Et2O, the Et2O layer distilled to remove O2NCH2CO2Et and II, b1 80-140°, to give 37 g. impure residue of EtO2CCH2COCH2CH(CHMe2)CH(NO2)CO2Et; this reduced with 20 g. Raney Ni and H at 80 kg./sq. cm. 6 hrs. at 20-5°, the product concentrated, Et2O added, stirred with 10% HCl, the aqueous layer treated with K2CO3, and extracted with Et2O gave 9 g. Et 2-ethoxycarbonyl-3-isopropyl-5-pyrrolidylideneacetate (III), b0.15 135-40°, m. 64°; the Et2O layer yielded 8 g. III, b0.3 143-5° m. 63°. Catalytically reducing 4.5 g. III in 30 ml. EtOH and 30 ml. AcOH with 200 mg. PtO2 and 300 mg. Pd-C 16 hrs. at room temperature and normal pressure of H, removing the solvent, stirring the residue with C6H6 and 10% HCl, treating the aqueous layer with K2CO3, and extracting the product with Et2O gave 3 g. 2,3,5-EtO2C(Me2CH)(EtO2CCH2)C4H6N (IV), b0.3 135°; picrate, needles, m. 145°. IV (1.6 g.) and 3.8 g. Ba(OH)2.8H2O in 6.2 ml. H2O refluxed 2.5 hrs., the Ba++ removed by addition of excess H2SO4, the H2SO4 removed by passing through Amberlite IR-4B, and the effluent concentrated gave 0.8 g. 2,3,5-HO2C(Me2CH)(HO2CCH2)C4H6N, prisms, m. 225° (decomposition) (H2O).
ACCESSION NUMBER: 1959:45139 HCAPLUS

L4 ANSWER 15 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB The reaction of cyclopent-2-enylacetone oxime (I) with Zn and AcOH yields an isomeric crystalline base, CH:CMH.NH.CH.CH.CH2.CH2.CHOH (II) and a liquid CBH13N (III) (dehydroxy derivative of II). Structures for II and III based on the interaction of the ring double bond with the electrophilic N are postulated.
ACCESSION NUMBER: 1959:45138 HCAPLUS
DOCUMENT NUMBER: 53:45138
ORIGINAL REFERENCE NO.: 53:8107E-g
TITLE: Some novel oxime reactions: a reinterpretation
AUTHOR(S): Meinwald, J.
CORPORATE SOURCE: Cornell Univ., Ithaca, NY
SOURCE: Proceedings of the Chemical Society, London (1958) 286-7
CODEN: PCSLAW; ISSN: 0369-8718
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT 109600-46-6
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 109600-46-6 HCAPLUS
CN Pyrrolidinium, 4-[2-(dimethylamino)propyl]-1,2-bis(ethoxycarbonyl)-1-methyl-, iodide (1:1) (CA INDEX NAME)



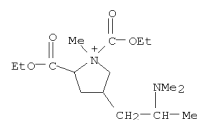
● I⁻

L4 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN (Continued)
ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB The reaction of cyclopent-2-enylacetone oxime (I) with Zn and AcOH yields an isomeric crystalline base, CH:CMH.NH.CH.CH.CH2.CH2.CHOH (II) and a liquid CBH13N (III) (dehydroxy derivative of II). Structures for II and III based on the interaction of the ring double bond with the electrophilic N are postulated.
ACCESSION NUMBER: 1959:45138 HCAPLUS
DOCUMENT NUMBER: 53:45138
ORIGINAL REFERENCE NO.: 53:8107E-g
TITLE: Some novel oxime reactions: a reinterpretation
AUTHOR(S): Meinwald, J.
CORPORATE SOURCE: Cornell Univ., Ithaca, NY
SOURCE: Proceedings of the Chemical Society, London (1958) 286-7
CODEN: PCSLAW; ISSN: 0369-8718
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT 109600-46-6
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 109600-46-6 HCAPLUS
CN Pyrrolidinium, 4-[2-(dimethylamino)propyl]-1,2-bis(ethoxycarbonyl)-1-methyl-, iodide (1:1) (CA INDEX NAME)



● I⁻

L4 ANSWER 16 OF 16 HCAPLUS COPYRIGHT 2009 ACS on STN
ED Entered STN: 22 Apr 2001
GI For diagram(s), see printed CA Issue.
AB The reaction of cyclopent-2-enylacetone oxime (I) with Zn and AcOH yields an isomeric crystalline base, CH:CMH.NH.CH.CH.CH2.CH2.CHOH (II) and a liquid CBH13N (III) (dehydroxy derivative of II). Structures for II and III based on the interaction of the ring double bond with the electrophilic N are postulated.
ACCESSION NUMBER: 1959:45138 HCAPLUS
DOCUMENT NUMBER: 53:45138
ORIGINAL REFERENCE NO.: 53:8107E-g
TITLE: Some novel oxime reactions: a reinterpretation
AUTHOR(S): Meinwald, J.
CORPORATE SOURCE: Cornell Univ., Ithaca, NY
SOURCE: Proceedings of the Chemical Society, London (1958) 286-7
CODEN: PCSLAW; ISSN: 0369-8718
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT 109600-46-6
(Derived from data in the 6th Collective Formula Index (1957-1961))
RN 109600-46-6 HCAPLUS
CN Pyrrolidinium, 4-[2-(dimethylamino)propyl]-1,2-bis(ethoxycarbonyl)-1-methyl-, iodide (1:1) (CA INDEX NAME)



● I⁻